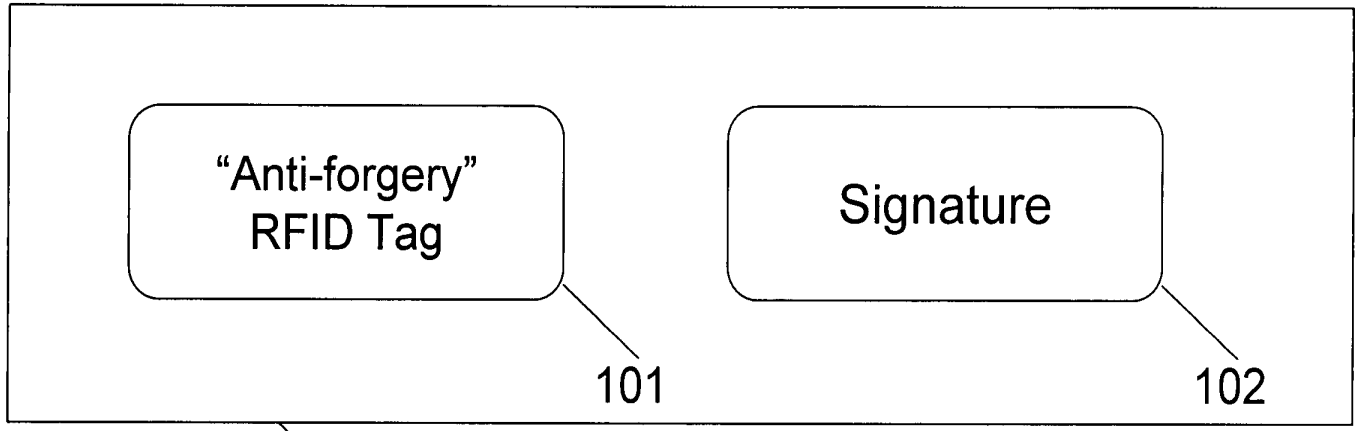

FIG. 1

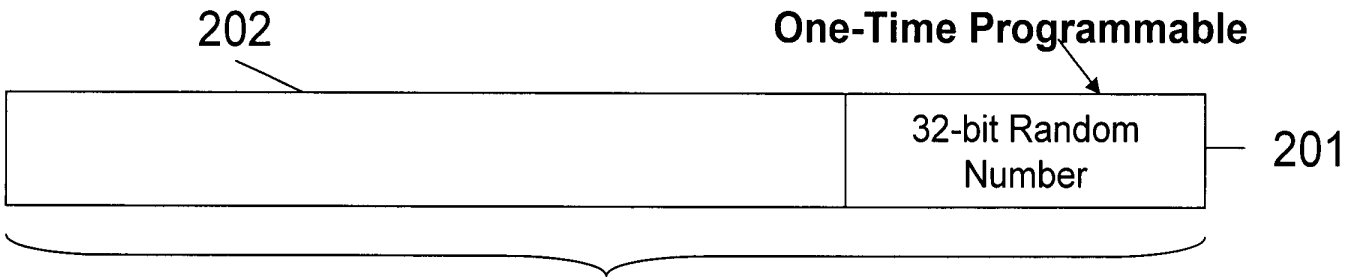

FIG. 2

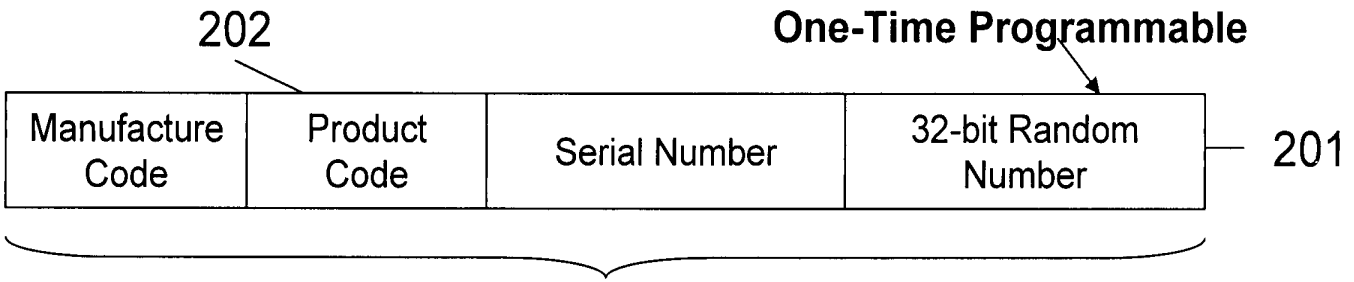

FIG. 3

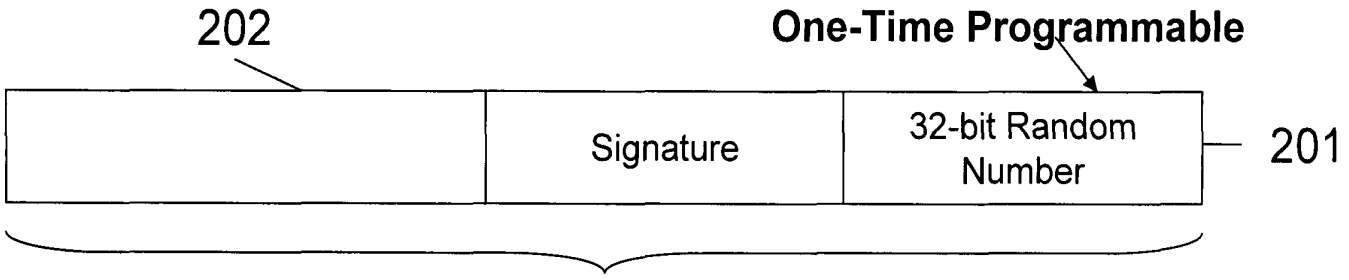
202
One-Time Programmable
Signature
32-bit Random Number
201
101

FIG. 4

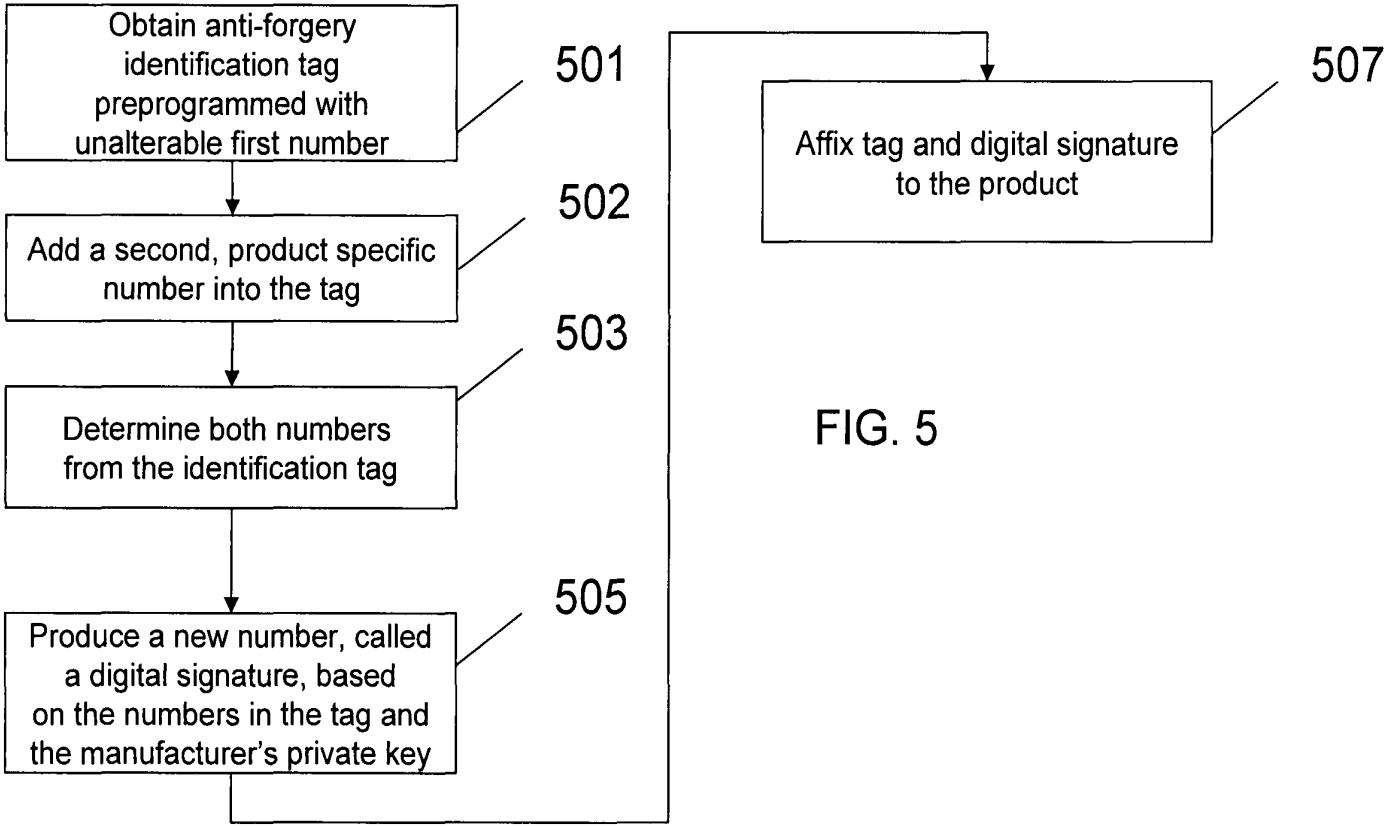
Obtain anti-forgery identification tag preprogrammed with unalterable first number
501
Add a second, product specific number into the tag
502
Determine both numbers from the identification tag
503
Produce a new number, called a digital signature, based on the numbers in the tag and the manufacturer's private key
505
Affix tag and digital signature to the product
507

FIG. 5

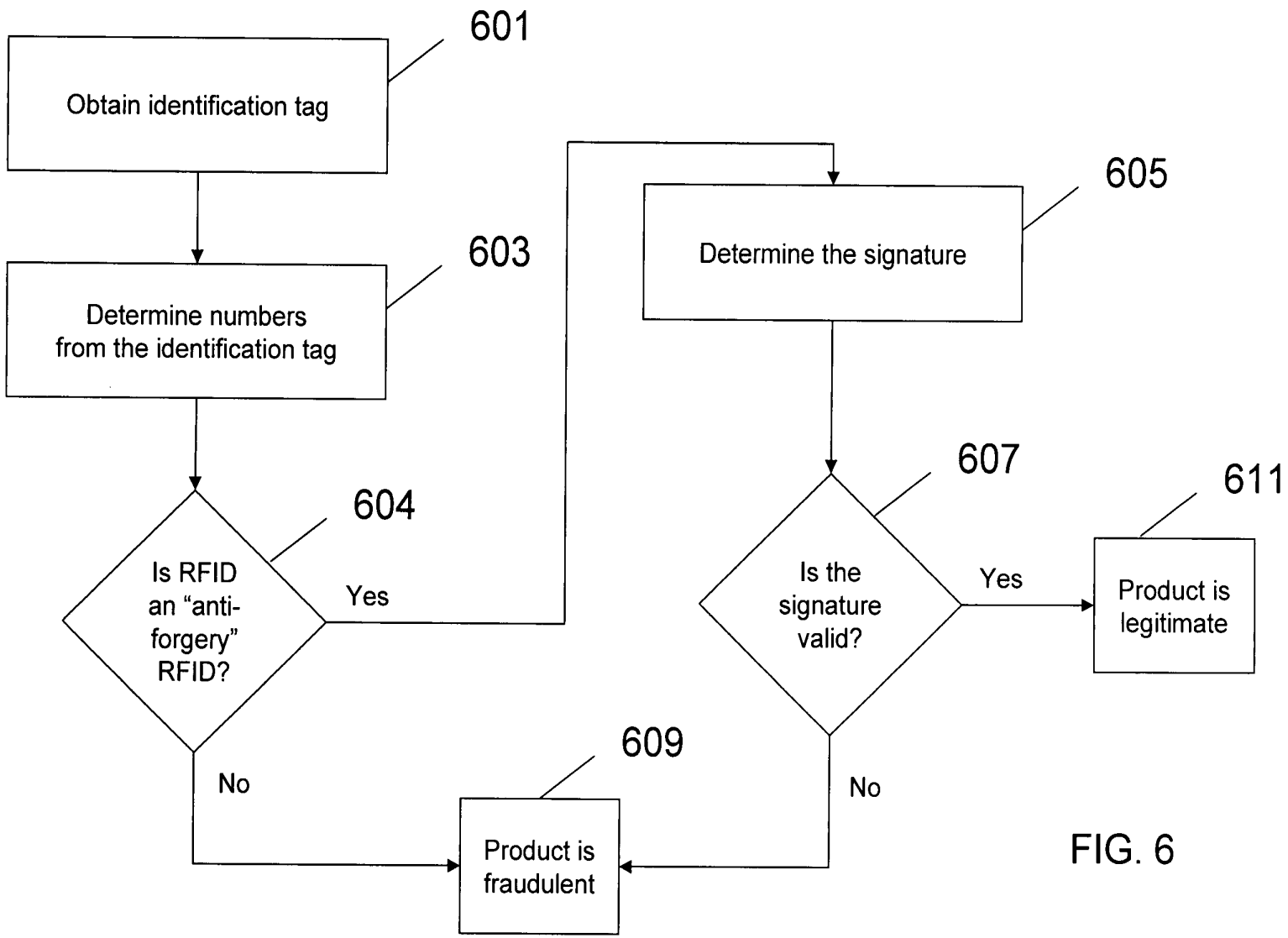
601
Obtain identification tag
603
Determine numbers from the identification tag
604
Is RFID an "anti-forgery" RFID?
Yes
No
605
Determine the signature
607
Is the signature valid?
Yes
No
609
Product is fraudulent
611
Product is legitimate

FIG. 6

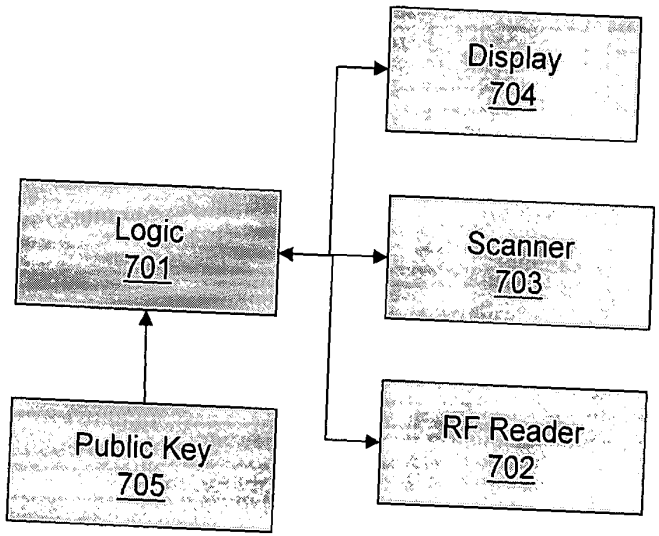
Display
704
Logic
701
Scanner
703
Public Key
705
RF Reader
702

FIG. 7
700

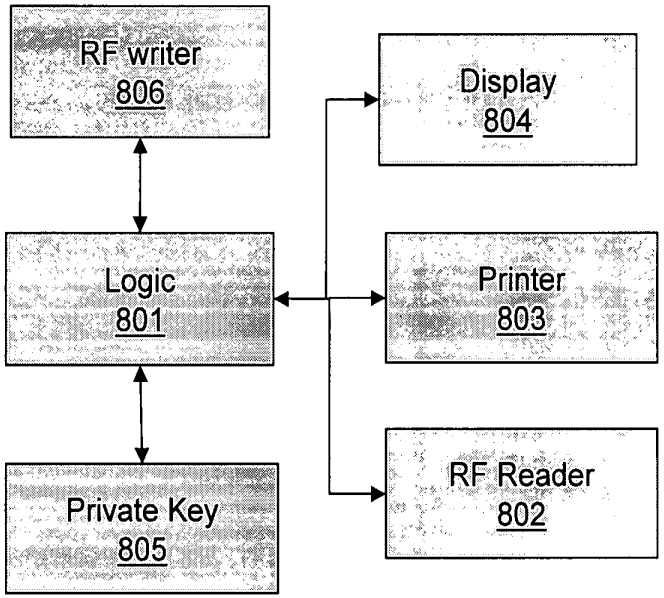
RF writer
806
Display
804
Logic
801
Printer
803
Private Key
805
RF Reader
802

FIG. 8
800